

THE BULLETIN

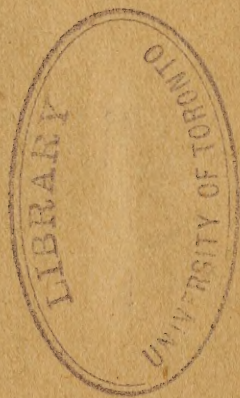
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Series

OF THE

Pictou Academy

....Scientific Association....

vol. I. no. 3



CONTENTS.

Contributions to a Flora of Nova Scotia.

Bog Plants.

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VOL. I.

PICTOU ACADEMY, APRIL 1907

NO. 3



THE Pictou Academy Scientific Association was instituted in 1882 and during the earlier years of its existence much valuable work was done by the various clubs of which it was composed, in making collections of the local fauna and flora and in stimulating interest among the students of the institution in Scientific work. These collections have been largely preserved in the Museum of the Academy and have been added to from time to time since. In later years, however, the laboratory classes to a great extent usurped the place of the old working clubs and the Scientific Association ceased to be a factor in the life of the Academy as a working organization. During the session of 1905-6 it was re-organized and in order that a record might be had of any work done by its members which might be of more general and permanent interest it was decided to publish bulletins from time to time, in which the results of such work might be preserved. The present number is the third of such publications.

Membership to the Association is open to all Academy students and alumni and to others, as associate members, who are interested in the work of the institution. A nominal fee of fifty cents per annum is exacted of members who wish to receive copies of the Bulletin as issued.

The officers for the current year are :

Hon. President :—R. MacLellan.

President :—C. L. Moore.

Vice-President :—H. H. Mussells.

Sec'y.-Treas.—H. F. Munro.

Executive :—The Officers, Miss H. Baird, W. H. Porter and E. T. Parker.

All correspondence should be addressed to H. F. Munro, Pictou Academy, Pictou, N. S.

Contributions to a Flora of Nova Scotia. I.

PLANTS COLLECTED IN EASTERN NOVA SCOTIA IN AUGUST, 1906.

CHARLES BUDD ROBINSON.

AT THE suggestion of Dr. N. L. Britton, Director-in-Chief of the New York Botanical Garden, my vacation trip during the above month was extended, to enable me to add to the collections of Nova Scotian plants then in the herbarium of that institution. From the species gathered it was therefore my general aim to exclude those already represented there by my own previous collections, and also those of very wide distribution. As a result, the species here enumerated are so far from being the only ones obtainable in Eastern Nova Scotia at that season, that few of the commonest are included. Yet as about a dozen are listed which are believed to be additions to the known flora of the province, and many others were secured in the hope of shedding light on obscure or disputed points, it has seemed advisable to publish the determinations, with a few notes added on points of interest. A full set of the plants is in the herbarium of the New York Botanical Garden, and the comparatively few duplicates were sent to Pictou and Truro Academies. Attention was nearly restricted to flowering plants, but a few belonging to lower groups were collected as occasion served.

Some ten days were spent on the west of the Island of Cape Breton from Mabou to Cheticamp. The collections made in the former district between the 7th and 10th were the most extensive, comprising Nos. 223-310 and 321-329, and a side trip on the 9th to Inverness added Nos. 311-320, obtained in a marsh near the shore.

On the morning of the 11th I walked up the valley of the N. E. Margaree from the Forks to Frizzleton, and thence with a guide went back over the hills to two large barrens known as McDonald's and Peter's, situated near the boundary of Inverness and Victoria Counties, at an elevation of about 1200 feet above sea level, being compelled in order to visit the latter to spend the night in the woods. It was impossible to explore it owing to heavy fog, and the rare fern *Schizaea pusilla* discovered there a year previously by Mr. G. E. Nichols was not seen, but other interesting finds were made. The Margaree collections are Nos. 330-383.

On the afternoon of the 13th, the road from the Big Intervale, at the head of settlement on the N. E. Margaree, was followed over the hills to Grand Etang, a well-rewarded stop being made at the lower end of Pembroke Lake, a beautiful sheet of water at an elevation of about 1200 feet, with rocky but low shores. Next morning, collections were made on an exposed bluff below Grand Etang, and at a large pond near Friar's Head. A severe storm then set in lasting several days, and although I went on to Eastern Harbour, this and the absence of means of transportation to the north prevented further progress, only a very few additions being made

there and on the return journey along the coast. The Cape Breton numbers run in all from 223 to 417.

Although separated by such short distances, each valley showed a very considerable proportion of different species from its neighbours. One new station was found for the male fern, on a rocky hillside at the Big Intervale of Margaree, but as usual only a couple of plants were seen, and they were in such wretched condition that they were not worth preserving. No effort was made to visit waterfalls or rocky glens either here or on the mainland, and therefore few mosses and no true ferns were gathered, but the rarer species of the latter were already represented by earlier collections.

Before and after this my headquarters were at Pictou. The only trip outside the limits of the county was a flying one on the 23rd, to Lochaber in Antigonish, and it proved unproductive. Within Pictou County several places were visited, though most of the species were gathered near the town. On East River the road was followed on the 25th from Springville to Grant's Lake at Millstream, and thence through Island and Eureka to Ferrona Junction; on the previous day a visit was made to the banks of West River below Durham, and on the 21st the ballast-heaps at Pictou Landing were explored. In spite of several less important journeys, the total area covered was very small, but carefully selected in the light of previous experience. The Pictou County numbers are 206-222, 418-465, and 476-531, those from Antigonish 466-475.

In all cases the determinations have been checked with the collections in the herbarium of the New York Botanical Garden, and in critical cases opinions have been sought from various specialists. Besides those named in the text, acknowledgements for valuable assistance are due to Dr. Britton, Dr. Rydberg, Mr. W. W. Eggleston, Mr. K. K. Mackenzie, Mr. W. H. Blanchard, and Mr. Percy Wilson.

The collections were as follows:—

ALGAE.

FUCACEAE.

Fucus serratus L. was found to be abundant at Grand Etang, completing for this species a chain of localities from Eastern Harbour to Point Tupper, and Pirate Harbour to Pugwash.

CHARACEAE.

- | | | |
|-----------------------------|-----------|----------------------------------|
| <i>Nitella flexilis</i> Ag. | | Between Antigonish and Lochaber, |
| | | No. 467. |
| <i>Chara vulgaris</i> L. | | Glendyer, Mabou, No. 287. |
| <i>C. fragilis</i> Desv. | | N. E. Margaree, No. 330. |

FUNGI.

Phycomycetes.

ALBUGINACEAE.

- | | | |
|--------------------------------------|-----------|---|
| <i>Albugo candida</i> (Pers.) Kuntze | | Pictou, No. 463a. On <i>Sisymbrium</i>
<i>officinale</i> |
| | | Det. by Mr. G. W. Wilson. |

Hepaticae.

MARCHANTIACEAE.

Marchantia polymorpha L. Mabou, No. 226.

Pellia sp. Cape Mabou, No. 309.

Ptilidium ciliare (L.) Nees . . . McDonald's Barren, No. 374.

DET. BY MRS. E. G. BRITTON AND MR. R. S. WILLIAMS.

Sphagnum cymbifolium Ehrh. . . Mabou, No. 326.

Dicranum scoparium (L.) Hedw. . Mabou, No. 277.

Gymnostomum rupestre Schwaegr. . . Mabou, No. 237.

Leptobryum pyriforme (L.) Wils. . Mabou, No. 225.

Polytrichum ohioense Ren. & Card. . Cape Mabou, No. 307.

P. commune L. Cape Mabou, No. 308.

Thuidium Philiberti Limpr. . . . Mabou, No. 275 ; N. E. Margaree,
No. 341.

Det. by Dr. G. N. Best.

Plagiothecium denticulatum (L.)

Br. & Sch. Mabou, No. 274.

P. striatellum Lindl. Mabou, No. 276.

Hypnum curvifolium Hedw. . . . N. E. Margaree, No. 342.

OPHIOGLOSSACEAE.

Botrychium Matricariae Spr. Between Margaree and Cheticamp,
No. 387.

Det. by Prof. L. M. Underwood.

Lycopodium lucidulum Michx. . McDonald's Barren, No. 364.

L. annotinum L. Between Margaree and Cheticamp,
No. 388.

L. clavatum L. McDonald's Barren, No. 363.

ISOETACEAE.

Isoetes echinospora Braunii (Durieu)

Engelm. N. E. Margaree, No. 335.
Det. by Mr. A. A. Eaton.

SPERMATOPHYTA.

Gymnospermae.

PINACEAE.

Larix laricina (Du Roi) Koch . . . Grand Etang, No. 411.
Juniperus nana Willd. McDonald's Barren, No. 365.

TAXACEAE.

Taxus canadensis Marsh. Pictou, No. 211.

Angiospermae.

MONOCOTYLEDONES.

SPARGANIACEAE.

Sparganium eurycarpum Engelm. Mabou, No. 227.
S. fluctuans (Morong) B. L. Robinson Millstream, No. 506.
S. simplex Huds. N. E. Margaree, No. 381.

NAIADACEAE.

Potamogeton Nuttallii Cham. & Schl. Millstream, No. 507.
P. pusillus L. Mabou, No. 264.

SCHEUCHZERIAEAE.

Triglochin palustris L. Inverness, No. 315.
T. maritima L. Inverness, No. 320.

ALISMATAEAE.

Alisma Plantago-aquatica L. Pictou, No. 526.
Sagittaria latifolia Willd. Lochaber, No. 472.

VALLISNERIACEAE.

Vallisneria spiralis L. Friar's Head, No. 403.

GRAMINEAE.

DETERMINED OR VERIFIED BY MR. G. V. NASH.

Chaetochloa viridis (L.) Scribn. Pictou, No. 481.
Cinna latifolia (Trev.) Griseb. Pictou, No. 212.
Calamagrostis Pickeringii A. Gr. Peter's Barren, No. 369.
Agrostis coarctata Ehrh. Mabou, No. 224.
A. hyemalis (Walt.) B. S. P. Mabou, No. 258.
Spartina cynosuroides (L.) Willd. Mabou, No. 284.
Phragmites Phragmites (L.) Karst. Friar's Head, No. 412.
Poa pratensis L. Mabou, No. 249.
Panicularia obtusa (Muhl.) Kuntze ? Peter's Barren, No. 372.

Not typical but nearer this species than to *P. canadensis*.

Agropyron repens (L.) Beauv. Mabou, No. 261.

CYPERACEAE.

- Eleocharis palustris* (L.) R. & S. Lochaber, No. 473.
E. palustris glaucescens (Willd.) A. Gr. N. E. Margaree, No. 345.
E. obtusa Schult. Belle Cote, Margaree, No. 417.
Scirpus nanus Spreng. Mabou, No. 251.
S. americanus Pers. Mabou, No. 262.
S. validus Vahl Mabou, No. 280.
Scirpus rubrotinctus Fernald Mabou, No. 286.
S. cyperinus (L.) Kunth Mabou, No. 303.
Eriophorum virginicum L. McDonald's Barren, No. 353;
 Pictou, No. 446. Alpine species of this genus were also seen on Mc-
 Donald's Barren, but were too advanced for determination, and not
 collected.
Rhynchospora alba (L.) Vahl McDonald's Barren, No. 347.
Carex abacta Bailey Pembroke Lake, No. 398.
C. intumescens Rudge Peter's Barren, No. 371.
C. lurida Wahl. Pictou, No. 445.
C. pseudo-cyperus L. Mabou, No. 278a.
C. Goodenovii J. Gay Mabou, No. 248; Pictou, No. 420.
C. gynandra Schwein. Mabou, No. 278.
C. stipata Muhl. Mabou, No. 256.
C. trisperma Dewey Mabou, No. 272; N. E. Margaree,
 No. 367.
C. scoparia Schk. Pictou, No. 430.
C. straminea echinodes Fernald Mabou, No. 273.

ARACEAE.

- Calla palustris* L. Pictou, No. 443.

LEMNACEAE.

- Spirodela polyrhiza* (L.) Schleid. Mabou, No. 329.
Lemna minor L. Mabou, No. 288.

ERIOCAULACEAE.

- Eriocaulon septangulare* With. Pembroke Lake, No. 396.

PONTEDERIACEAE.

- Pontederia cordata* L. Millstream, No. 509.

JUNCACEAE.

- Juncus bufonius* L. Mabou, No. 246.
J. nodosus L. Mabou, No. 238; N. E. Margaree,
 No. 344.
J. canadensis J. Gay Friar's Head, No. 404.
J. canadensis brevicaudatus Engelm. McDonald's Barren, No. 360.
Juncoides campestre (L.) Kuntze Pictou, No. 418.

CONVALLARIACEAE.

- Clintonia borealis* (Ait.) Raf. Pictou, No. 213.
Streptopus amplexifolius (L.) DC. Pictou, No. 219.
S. roseus Michx. Mabou, No. 293.

IRIDACEAE.

- Sisyrinchium angustifolium* Miller Inverness, No. 319; Pictou Land-
ing, No. 450.

ORCHIDACEAE.

- Gymnadeniopsis clavellata* (Michx.) Rydb. Between Margaree and Cheti-
camp, No. 386; Pictou, No. 435.
Limnorchis media Rydb. Glendyer, Mabou, No. 290.
Blephariglottis blephariglottis (Willd.)
Rydb. Peter's Barren, No. 366.
B. lacera (Michx.) Rydb. Cape Mabou, No. 305.
B. psycodes (L.) Rydb. Cape Mabou, No. 306.
Ibidium plantagineum (Raf.) House Between Margaree and Cheticamp,
No. 385.
I. cernuum (L.) House Pictou, No. 206; Inverness, No. 312.
I. gracile (Bigel.) House Grand Etang, No. 406.
Achroanthes unifolia (Michx.) Raf. Pictou, No. 426.
Corallorhiza multiflora Nutt. Pictou, No. 218.

DICOTYLEDONES.

MYRICACEAE.

- Myrica Gale* L. Lochaber. No. 471.
M. carolinensis Miller Grand Etang, No. 400.

BETULACEAE.

- Alnus Alnobetula* (Ehrh.) K. Koch Island, No. 513.
A. incana (L.) Willd. Loch Broom, No. 465.

MORACEAE.

- Humulus Lupulus* L. Thicket beside East River, Island,
Pictou Co., No. 516, thoroughly
established.

LORANTHACEAE.

- Razoumofskyia pusilla* (Peck) Kuntze Point Cross, Cheticamp, No. 416.
on *Picea Mariana*. This is the most northerly station from which it
has yet been recorded in Nova Scotia, but it is doubtless found
throughout the eastern part of the province, especially near the coast.
It is best known around Pictou, where attention was first called to it
by Dr. C. D. Howe, who found it at Bay View, while on a collecting
trip for the New York Botanical Garden, in 1902. It is very abundant
on both sides of the entrance to Pictou Harbour, where it has destroy-

ed several fine trees, and occurs also at Saw Mill Creek, Toney River, Cape John and Plainfield. It is also found at Cape George, Antigonish Co., and in various places between Hastings and Creignish, and from Mabou to Strathlorne, Inverness. In 1891, the late A. C. L. Oliver showed me a large growth near the top of a spruce and informed me that Prof. Lawson had told a Dalhousie class that it was due to a species of mistletoe. This can only refer to the present plant, so it must also be found at Halifax.

It is further curious that this northern outlier of a great tropical family should be the first plant to flower in spring. The season of 1903 at Pictou was unusually cold and late, yet many staminate flowers of the dwarf mistletoe were found fully developed by the middle of March, a full month before *Alnus incana*, always considered the earliest flowering plant in the region. In spite of careful search no pistillate flowers were found, and later in the spring the exposed parts of the plants disappeared. The fruit is found in the fall, so if these necessarily incomplete observations should be confirmed, enquiry into its life history may yield interesting results. It may also be suggestive that infected branches often show a very large number of mistletoe plants at the junction between the last and next to the last year's wood. The host plants noted in Nova Scotia are the black and the white spruce, but almost exclusively the former.

POLYGONACEAE.

<i>Rumex Britannica</i> L. ?	. . .	Mabou, No. 255.
<i>R. crispus</i> L.	. . .	Mabou, No. 254
<i>Polygonum amphibium</i> L.	. . .	Friar's Head, No. 401 ; Millstream, No. 508.
<i>P. pennsylvanicum</i> L.	. . .	Pictou, No. 422
<i>P. cilinode</i> Michx.	. . .	N. E. Margaree, No. 377.
<i>P. sagittatum</i> L.	. . .	Mabou, No. 302.

CHENOPODIACEAE.

<i>Atriplex hastata</i> L.	. . .	Mabou, No. 325
<i>Dondia americana</i> (Pers.) Britton	. . .	Inverness, No. 318.
<i>Salsola Kali</i> L.	. . .	Eastern Harbour, No. 415.

AMARANTHACEAE.

<i>Amaranthus retroflexus</i> L.	. . .	Pictou, No. 478 Also seen at Windsor Junction.
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CARYOPHYLLACEAE.

<i>Silene vulgaris</i> (Moench) Garcke	. . .	Springville, No. 498.
<i>Saponaria officinalis</i> L.	. . .	Pictou, No. 493.
<i>Alsine graminea</i> (L.) Britton	. . .	Pictou, No. 424.
<i>Sagina procumbens</i> L.	. . .	Pictou, No. 209 ; N. E. Margaree, No. 340.
<i>Spergula arvensis</i> L.	. . .	Pictou, No. 432.
<i>Tissa canadensis</i> (Pers.) Britton	. . .	Mabou, No. 245.
<i>T. rubra</i> (L.) Britton	. . .	Pictou, No. 529.

NYMPHAEACEAE.

- Brasenia purpurea* (Michx.) Casp. . . Millstream, No. 510.
Nymphaea advena Soland. . . . McDonald's Barren, No. 355,
 (seedlings)
Castalia odorata (Dryand.) Woodv. &
 Wood. Pembroke Lake, No 393 ;
 Millstream, No. 512.

RANUNCULACEAE.

- Actaea rubra* (Ait.) Willd. . . . West River, No 486.
Delphinium Ajacis L. Pictou, No. 476.
Clematis virginiana L. N E. Margaree, No. 332 ;
 Springville, No. 501.
Ranunculus reptans L. Pembroke Lake, No. 392
Batrachium trichophyllum (Chaix)
 Bossch N. E. Margaree, No 331.
Oxygraphis Cymbalaria (Pursh) Prantl Mabou, No. 242
Thalictrum polygamum L. Mabou, Nos. 230, 257.

CRUCIFERAE.

- Lepidium ruderae* L. Pictou, No. 477.
Sisymbrium officinale (L.) Scop. . . . Pictou, No 463.
Cakile edentula (Bigel.) Hook. . . . Inverness, No 311.
Diplotaxis muralis (L.) DC. Pictou Landing, No 455.
Brassica juncea (L.) Cosson Pictou, No 423 ; Pictou Landing,
 No 454.
Cardamine pennsylvanica Muhl. . . . Pembroke Lake, No 397.

DROSERACEAE.

- Drosera rotundifolia* L. McDonald's Barren, No. 349.
D. intermedia Hayne McDonald's Barren, No 348.

CRASSULACEAE.

- Sedum Fabaria* Koch N. E. Margaree, No. 383.

SAXIFRAGACEAE.

- Mitella nuda* L. Mabou, No 294

GROSSULARIACEAE.

- Ribes lacustre* (Pers.) Poir. Mabou, No. 291.

ROSACEAE.

- Spiraea latifolia* (Ait.) Borkh. . . . Inverness, No. 314 ; between
 Antigonish and Lochaber,
 No. 469 ; Springville, No. 503.
S. tomentosa L. Pictou, No. 428. Very common in
 Pictou Co., but not observed in
 Cape Breton, though especially
 watched for.

<i>Rubus Chamaemorus</i> L. . . .	McDonald's Barren, No. 354.
<i>R. triflorus</i> Richards. . . .	N. E. Margaree, No. 379 ; Springville, No. 495.
<i>R. strigosus</i> Michx. . . .	West River, No. 488.
<i>R. Randii</i> (Bailey) Rydb. ? . . .	Pictou, No. 528
<i>R. canadensis</i> L.	Mabou, No. 232 ; between Anti- gonish and Lochaber, No. 468.
<i>R. nigricans</i> Rydb.	Springville, No. 494.
<i>R. hispidus</i> L.	Pictou, No. 531.
<i>Sibbaldiopsis tridentata</i> (Soland.) Rydb.	Grand Etang, No. 405.
<i>Fragaria americana</i> (Porter) Britton .	Mabou, No. 292.
<i>Comarum palustre</i> L.	Inverness, No. 316.
<i>Argentina Anserina</i> (L.) Rydb. . .	Mabou, No. 247
<i>Potentilla argentea</i> L.	East River Loading Ground, No. 525. Abundant in at least some localities in Western N. S., but in the east only known to me from the one mentioned.
<i>P. monspeliensis</i> L.	Inverness, No. 317.
<i>P. canadensis</i> L.	Pictou, No. 437.
<i>Geum canadense</i> Jacq.	Mabou, No. 231 ; West River, No. 485.
<i>Agrimonia hirsuta</i> (Muhl.) Bicknell .	Mabou, No. 233.
<i>Sanguisorba canadensis</i> L.	Inverness, No. 317A, (one speci- men seen) ; abundant along the Margaree, No. 339, and at Cheti- camp, also on the eastern coast at Ingonish and Aspy Bay.
<i>Rosa lucida</i> Ehrh.	Mabou, No. 281 ; Grand Etang, No. 399.

POMACEAE.

<i>Sorbus americana</i> Marsh. . . .	Springville, No. 505.
<i>Aronia atropurpurea</i> Britton . . .	Pictou, No. 429.
<i>Amelanchier canadensis</i> (L.) Medic.	N. E. Margaree, No. 376 ; Pictou, No. 439.
<i>Crataegus Brunetiana</i> Sarg. . . .	Mabou, No. 234 ; Saltspings, Antigonish Co., No. 466. The most widely distributed native species of the genus in eastern Nova Scotia.
<i>C. Randiana</i> Sarg.	Island, No. 519.

DRUPACEAE.

<i>Prunus virginiana</i> L.	Lochaber, No. 470 ; Springville, No. 504.
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PAPILIONACEAE.

<i>Medicago lupulina</i> L.	. . .	Pictou, No. 447.
<i>Melilotus alba</i> Desv.	. . .	Pictou Landing, No. 459.
<i>M. officinalis</i> (L.) Lam.	. . .	Pictou Landing, No. 460.
<i>Trifolium procumbens</i> L.	. . .	Pictou, No. 210.
<i>Meibomia canadensis</i> (L.) Kuntze	. . .	West River, No. 484. Occurs also on East and Middle Rivers.
<i>Vicia hirsuta</i> (L.) Koch	. . .	Pictou Landing, No. 456.
<i>Lathyrus palustris</i> L.	. . .	Inverness, No. 313.
<i>Falcata comosa</i> (L.) Kuntze	. . .	West River, No. 489. Probably the species reported from here as <i>Apia tuberosa</i> . Seen also at Ferrona.

GERANIACEAE.

<i>Geranium Robertianum</i> L.	. . .	Mabou, No. 228.
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OXALIDACEAE.

<i>Oxalis stricta</i> L.	. . .	Springville, No. 499.
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EUPHORBIACEAE.

<i>Euphorbia Helioscopia</i> L.	. . .	Pictou, No. 444.
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CALLITRICHACEAE.

<i>Callitriche palustris</i> L.	. . .	Mabou, No. 328.
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EMPETRACEAE.

<i>Empetrum nigrum</i> L.	. . .	McDonald's Barren, No. 352.
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ANACARDIACEAE.

<i>Rhus hirta</i> (L.) Sudw.	. . .	Antigonish, No. 475.
<i>R. radicans</i> L.	. . .	Ferrona, No. 522.

AQUIFOLIACEAE.

<i>Ilex verticillata</i> (L.) A. Gray?	. . .	Pictou, No. 440.
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ACERACEAE.

<i>Acer spicatum</i> Lam.	. . .	Island, No. 517.
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BALSAMINACEAE.

<i>Impatiens biflora</i> Walt.	. . .	N. E. Margaree, No. 337.
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MALVACEAE.

<i>Malva moschata</i> L.	. . .	N. E. Margaree, No. 343.
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HYPERICACEAE.

<i>Hypericum ellipticum</i> Hook.	. . .	Springville, No. 496.
<i>H. perforatum</i> L.	. . .	Mabou, No. 297.
<i>H. canadense</i> L.	. . .	Pembroke Lake, Nos. 390, 391.
<i>Triadenum virginicum</i> (L.) Raf.	. . .	Mabou, No. 267.

VIOLACEAE.

- Viola incognita* Brainerd . . . Mabou, No. 268.
V. blanda Willd., northern form. . . Mabou, No. 268A. This and the preceding were identified by President Brainerd. Both are wood violets, the common meadow white violet known until recently in Nova Scotia as elsewhere under the name of *V. blanda* being really *V. pallens* (Banks) Brainerd.
V. labradorica Schrank. . . . N. E. Margaree, No. 378.
V. sp. Probably a hybrid of *V. septentrionalis* and *V. cucullata*, Pictou, No. 421.

ONAGRACEAE.

- Isnardia palustris* L. . . . West River, No. 490.
Epilobium palustre L. . . . Pictou, No. 217.
E. adenocaulon Haussk. . . . Mabou, No. 263.
Kneiffia pumila (L.) Spach . . . Pictou, No. 442.
Circaea alpina L. . . . Pictou, No. 216.

HALORAGIDACEAE.

- Myriophyllum spicatum* L. . . . N. E. Margaree, No. 333.
M. alterniflorum DC. . . . Millstream, No. 511.

ARALIACEAE.

- Aralia nudicaulis* L. . . . Pictou, No. 221.

UMBELLIFERAE.

- Sanicula marilandica* L. . . . West River, No. 487.
Washingtonia Claytoni (Michx.) Britton Mabou, No. 229.
Cicuta maculata L. . . . Mabou, No. 259.
Angelica atropurpurea L. . . . Mabou, No. 235.
Pastinaca sativa L. . . . Mabou, No. 253.

CORNACEAE.

- Cornus canadensis* L. . . . McDonald's Barren, No. 356.
C. stolonifera Michx. . . . Springville, No. 497.
C. alternifolia L. f. . . . Lochaber, No. 474 ; Eureka, No. 520.

PYROLACEAE.

- Moneses uniflora* (L.) A.Gray . . . Pictou, No. 215.

MONOTROPACEAE.

- Monotropa uniflora* L. . . . Mabou, No. 289.

ERICACEAE.

<i>Rhodora canadensis</i> L.	Pictou, No. 431.
<i>Kalmia angustifolia</i> L.	McDonald's Barren, No. 350 B.
<i>K. glauca</i> Ait.	McDonald's Barren, No. 350 A.
<i>Andromeda Polifolia</i> L.	McDonald's Barren, No. 350.
<i>Gaultheria procumbens</i> L.	Grand Etang, No. 409.

VACCINIACEAE.

<i>Gaylussacia resinosa</i> (Ait.) T. & G.	Pictou, No. 434.
<i>Vitis-Idaea Vitis-Idaea</i> (L.) Britton	Grand Etang, No. 407.
<i>Chiogenes hispidula</i> (L.) T. & G.	McDonald's Barren, No. 362.
<i>Oxycoccus macrocarpus</i> (Ait.) Pers.	Grand Etang, No. 408 ; Pictou, No. 438.

PRIMULACEAE.

<i>Lysimachia terrestris</i> (L.) B. S. P.	Mabou, No. 260.
<i>Glaux maritima</i> L.	Pictou Landing, No. 448.
<i>Anagallis arvensis</i> L.	Pictou, No. 462.

PLUMBAGINACEAE.

<i>Limonium carolinianum</i> (Walt.) Britton	Loch Broom, No. 491.
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GENTIANACEAE.

<i>Tetragonanthus deflexus</i> (J. E. Smith)	
Kuntze	Between Margaree and Cheticamp, No. 384 ; Grand Etang, No. 410. As different in habit as in habitat.

MENYANTHACEAE.

<i>Menyanthes trifoliata</i> L.	Mabou, No. 327.
<i>Limnanthemum lacunosum</i> (Vent.)	
Griseb.	Pembroke Lake, No. 394.

APOCYNACEAE.

<i>Apocynum androsaemifolium</i> L.	Mabou, No. 304.
<i>A. cannabinum</i> L.	Springville, No. 502.

CONVOLVULACEAE.

<i>Convolvulus sepium</i> L.	Mabou, No. 250.
<i>C. arvensis</i> L.	Pictou Landing, No. 458.

BORAGINACEAE.

<i>Myosotis laxa</i> Lehm.	Pictou, No. 207 ; Mabou, No. 243.
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VERBENACEAE.

<i>Verbena hastata</i> L.	Forks East River, Ferrona, No. 521.
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LABIATAE.

<i>Scutellaria lateriflora</i> L.	Mabou, No. 269.
<i>S. galericulata</i> L.	Mabou, No. 244.
<i>Galeopsis Tetrahit</i> L.	Mabou, No. 279.
<i>Stachys palustris</i> L.	Pictou, No. 433.
<i>Clinopodium vulgare</i> L.	N. E. Margaree, No. 389.
<i>Lycopus membranaceus</i> Bicknell	Mabou, No. 241.
<i>L. americanus</i> Muhl.	Pictou, No. 436.
<i>Mentha canadensis</i> L.	Mabou, No. 252.

SOLANACEAE.

<i>Solanum Dulcamara</i> L.	Mabou, No. 285.
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SCROPHULARIACEAE.

<i>Chaenorrhinum minus</i> (L.) Lange	Pictou Landing, No. 461.
<i>Chelone glabra</i> L.	N. E. Margaree, No. 382.
<i>Mimulus ringens</i> L.	N. E. Margaree, No. 336.
<i>Veronica scutellata</i> L.	Pictou, Nos. 208, 527.
<i>Euphrasia americana</i> Wettst.	Mabou, No. 223.
<i>Rhinanthus Crista-Galli</i> L.	Mabou, No. 240.
<i>Melampyrum lineare</i> Lam.	McDonald's Barren, No. 358.

LENTIBULARIACEAE.

<i>Utricularia cornuta</i> Michx.	McDonald's Barren, No. 346.
<i>U. vulgaris</i> L.	N. E. Margaree, No. 334 ; Friar's Head, No. 402.

PLANTAGINACEAE.

<i>Plantago lanceolata</i> L.	Pictou, No. 464.
<i>P. maritima</i> L. ?	Eastern Harbour, No. 414.

A very peculiar form, closely approaching *P. borealis* Lange, which it more nearly resembles in habit, except that the spikes always overtop the leaves. The capsule of *P. maritima* is said to be 2-seeded, that of *P. borealis*, 4-seeded. Three out of 4 capsules from the Cheticamp plant had each 3 seeds, though in two cases one was less developed than the others, the fourth was probably 2-seeded. The bracts varied greatly on the same individual. *P. maritima* is frequent on the rocky cliffs along this coast, *P. borealis* is not reported from the province. The plants were dwarfed, growing amongst grass on the top of a bleak headland at the entrance to Eastern Harbour.

RUBIACEAE.

<i>Galium triflorum</i> Michx.	Mabou, No. 282 ; Springville, No. 500.
<i>G. tinctorium</i> L.	Pictou, No. 214 ; Mabou, Nos. 239, 271.
<i>G. asprellum</i> Michx.	Mabou, No. 270.

CAPRIFOLIACEAE.

<i>Sambucus canadensis</i> L.	Mabou, No. 266.
<i>Viburnum Opulus</i> L.	Island, No. 515.
<i>V. cassinoides</i> L.	McDonald's Barren, No. 357.
<i>Linnaea americana</i> Forbes	Pictou, No. 222.
<i>Diervilla Diervilla</i> (L.) MacM.	Ferrona Junction, No. 523.

CAMPANULACEAE.

<i>Campanula intercedens</i> Witasek	Eastern Harbor, No. 413 ; Island No. 518.
<i>C. rapunculoides</i> L.	Pictou, No. 480.
<i>Lobelia Dortmanna</i> L.	Pembroke Lake, No. 395.
<i>L. inflata</i> L.	Pictou, No. 441.

CICHORIACEAE.

<i>Cichorium Intybus</i> L.	Mabou, No. 324.
<i>Tragopogon pratensis</i> L.	Pictou, No. 479. Has apparently not spread as yet outside the town limits, but will likely be heard from later as a troublesome weed.
<i>Sonchus arvensis</i> L.	Mabou, No. 321.
<i>S. oleraceus</i> L.	Pictou, No. 482.
<i>Hieracium Pilosella</i> L.	Was not yet in flower, and was not collected, but it is desirable to call attention to it as a dangerous weed. It is thoroughly estab- lished on both sides of the mouth of Pictou Harbour, espec- ially in the Sea View Cemetery. Also seen at Cape George, Anti- gonish Co, in 1903, but its hold seemed precarious.
<i>H. canadense</i> Michx.	McDonald's Barren, No. 361.
<i>H. scabrum</i> Michx.	Mabou, No. 265.

AMBROSIAEAE.

<i>Ambrosia artemisiaefolia</i> L.	Pictou Landing, No. 451.
<i>Xanthium echinatum</i> Murr.	Pictou Landing, No. 449.

COMPOSITAE.

<i>Eupatorium perfoliatum</i> L.	Pictou, No. 427.
<i>Solidago macrophylla</i> Pursh	Cape Mabou, No. 310.
<i>S. Purshii</i> Porter	McDonald's Barren, No. 351.
<i>S. sempervirens</i> L.	Loch Broom, No. 492.
<i>S. juncea</i> Ait.	Ferrona Junction, No. 524.

<i>A. canadensis glabrata</i> Porter	Cape Mabou, No. 300.
<i>Aster pumilus</i> L.	Cape Mabou, No. 301.
<i>A. Radula biflorus</i> (Michx.) Porter	McDonald's Barren, No. 359.
<i>A. nemoralis</i> Ait.	Peter's Barren, No. 368.
<i>A. acuminatus</i> Michx.	Pictou, No. 220.
<i>A. paniculatus</i> Lam.	Island, No. 514.
<i>Erigeron ramosus</i> (Walt.) B. S. P.	Mabou, No. 283.
<i>Leptilon canadense</i> (L.) Britton	Pictou Landing, No. 452.
<i>Doellingeria umbellata</i> (Mill.) Nees	N. E. Margaree, No. 338 ; Peter's Barren, No. 370.
<i>Antennaria neodiola</i> (Greene)	Between Margaree and Cheticamp, No. 389.
<i>Anaphalis margaritacea</i> (L.) B. & H.	Mabou, No. 299.
<i>Rudbeckia hirta</i> L.	Mabou, No. 298.
<i>Bidens frondosa</i> L.	Pictou, No. 419, No. 425, ? the latter specimen very far from typical.
<i>Matricaria inodora</i> L.	Mabou, No. 322.
<i>Artemisia biennis</i> Willd.	Pictou, No. 530.
<i>A. vulgaris</i> L.	Pictou Landing, No. 457.
<i>Tussilago Farfara</i> L.	Pictou, No. 483.
<i>Senecio vulgaris</i> L.	Mabou, No. 323.
<i>S. viscosus</i> L.	Pictou Landing, No. 453.
<i>Carduus muticus</i> (Michx.) Pers.	Source Middle River, Victoria Co., No. 375.

—NEW YORK BOTANICAL GARDEN.



MR. BAILLIE in his paper in the last number of THE BULLETIN seems to me to err in not distinguishing carefully between the flora of a peat bog such as the barrens north of Pictou town, and that of the high level bogs of Cape Breton. *Rubus Chamaemorus* is very abundant in many of the latter, and also occurs at various places on the Atlantic slope, but I do not know any authentic record of it from Pictou. The same statement applies to *Andromeda Polifolia*, but the latter may have been confused by him with one of the species of *Kalmia*. *Vaccinium corymbosum* is probably not found in Eastern Nova Scotia.

C. B. ROBINSON.

